THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, JAN. 24, 1835.

Acknowledgment.

We received a few days since a letter from a subscriber in Hudson, enclosing twenty dollars, two of which was for his own paper for 1835, and $18 for nine new subscribers, whose names were forwarded with it. The writer has our thanks for his very friendly letter and for his patriotic exertions to extend the circulation of the Farmer; and we trust his example, for he has been most disinterested, as he is not himself a farmer, will be followed by many other of our subscribers. There are so few people who think of taking an Agricultural paper without being urged to it, that no such paper can be long sustained without the continued effort of its friends.

Gama Grass.

We have the pleasure of announing the receipt, the present week, of a very interesting communication on the culture of *Gama Grass*, from our esteemed friend T. S. P. of Beaver Dam, (Va.) whose article on the culture of *Perennial Rye Grass* appears in this number of the Farmer. The communication, which will appear in our next paper, was accompanied by one hundred seeds of the Gama Grass, which we shall be happy to divide among such of our subscribers as may apply for it.

St. Foin Seed.

We have also received from our friend DAVID THOMAS a small parcel of St. Foin seed, raised in his garden the past summer, for distribution. It should be sown in the spring, and *well*, though not *deeply*, covered. It needs the growth of one season to become so well rooted as to resist the action of the frost. The soil selected should be sandy with a dry subsoil, so that the roots may extend freely and deeply through it. In the note accompanying the seed, D. T., after remarking that he cultivates the St. Foin as an ornamental plant in his garden, and also for the purpose of exhibiting a plant which is so justly celebrated, says:—"I cultivate Lucern for the same purposes. Our land in this quarter is generally too heavy for these artificial grasses, and I cultivate both in artificial soils. There is no inconsiderable part of the Genesee Country, however, in which I think they might be introduced to great advantage. The Ridge Road may be particularly mentioned as a favorable soil."

☞ RHO has left at our office a bottle of the Catsup made from the Tomato, which may be seen and tasted by any of our friends. It is a very superior article.

American Gardener's Magazine.

We have received the first number of a work bearing this title, issued in Boston, to be continued monthly, by C. M. HOVEY and P. B. HOVEY, Jr. It is intended as a "Register of all useful discoveries and improvements in Horticulture and Rural affairs." From a perusal of No. 1, we are induced to believe it will prove an interesting and useful work, well worthy the support of the scientific culturist. It is handsomely executed, at $3 a year.

Dairy House.

A subscriber in Ohio wishes us to publish a plan of an approved Dairy House, say for fifty cows. Will some of our correspondents furnish such a plan for publication?

On the Radiation of Heat.

In some of our preceding volumes,* this wonderful phenomenon has been explained or referred to; and we now introduce from Scoresby's Journal, a remarkable instance in exemplification of Dr. Wells's discovery. We have seen no cause, however, for halting between two opinions, as that voyager appears to have done; neither can we conceive how "the *cold* influence of the atmosphere" could pass through a *warmer* medium into the sea-water.

"This night stars were seen for the first time during fifteen weeks, the sky being beautifully clear. The sea, as usual on such occasions, began to freeze as soon as the sun descended within four or five degrees of the horizon, though *the temperature of the air was considerably above the freezing point.* Whether the heat of the water be radiated into the atmosphere, according to the theory of Dr. Wells, or whether a cold influence of the atmosphere be conveyed to the water, may be a doubtful question; but the fact that *the water more rapidly loses its heat when exposed to the full aspect of a cloudless sky*, is certain. In cloudy weather, no freezing of the sea ever occurs, I believe, till the temperature of the air is below 29°: but in the instance now alluded to, the freezing commenced when the temperature was 36°, being about 8° above the freezing point of sea-water."

The gardener who has a tender plant, may place over it an empty box to keep off the cold; and several reasons may be given in behalf of this practice. Sudden changes of temperature are always unfavorable. A current of cold air would rapidly absorb the heat; but the box repels that current; and though it gradually cools, the warmth of the soil rises from below, and moderates the change that is taking place. If the cold is of short duration, as in a frosty night late in spring, this protection may preserve every thing within the box above the freezing point.

In this view of the subject we have only referred to that loss of heat which is occasioned by *the contact of colder bodies.* We shall now consider the *additional* effects of radiation. All the heat that an *uncovered* plant radiates to the clear sky, is lost: none is returned from the frozen depths of ether; but the plant under the box, loses but little by this mysterious exchange, the boards giving back for a long time the greater portion of what they receive.

* Vol. 1, p. 129, and vol. 4, p. 35.

The Season.

(*In a letter of the 10th inst. from Cayuga county.*)

I have no recollection of having seen *in this country*, such weather as we have had for some days past. It is usual here, when the thermometer is below zero, to have low clouds, evidently the condensed vapor of the lakes, continually shedding fine snow; and shutting out, either partially or wholly, the direct rays of the sun. At this time, however, it has been below zero with a clear sky, excepting the fog-cloud which hovers every morning over the lake, like the steam from an immense cauldron. It has been nearly calm, or with light airs, chiefly from the northeast, but ranging round to the east and southeast; and perhaps this will explain the cause of our intensely cold and cloudless atmosphere, no lakes of much extent lying in that direction.

Yesterday morning, at Poplar Ridge, almost 700 feet above the Cayuga Lake, the mercury stood 14° below zero; but near the shore it was not so low by several degrees. That was the coldest time that we have had this season, though not the most uncomfortable to those whom business led abroad. Every body knows that a brisk wind increases the severity of winter.

This morning every tree, and shrub, and spire of grass, was beautifully fringed with frost-work, and so dense that I have never seen it equalled. It was probably caused by a temporary breeze from the lake. The twigs were literally covered; and none of them, when in full bloom, will appear half so gay as at that moment. A bright sunshine, however, soon began to operate; and as it melted first on the larger branches, where the reflection was the greatest, the extremities retained their crests the longest, greatly resembling a bunch of white blossoms.

On Lucky and Unlucky Days.

We have sometimes thought it was as necessary to root out certain *errors* from the mind, as it is to extirpate *weeds* from the soil,—because the sure effects of both are to impoverish, crowd upon, and overshadow better things.

It is a curious circumstance that many of the superstitions of the old heathens,—the Phœnicians, Greeks, and Romans,—continue in Christian countries, like the weeds that infest our fields. The popular notions of witchcraft for example, appear to be the same as in the days of *Homer*, almost 3000 years ago; and many have heard of people who in our times were *said* to be as expert as *Circe* was, when she changed the soldiers of Ulysses into swine.

The worship of Baal, which involved the Israelites in such awful calamities, is probably continued, though in a milder form, in several countries of Europe, down to the present day. As late as the year 1807, fires,*—the remains of this ancient idolatry,—were annually lighted *on the*

* On the authority of L. Von Buch.

hills throughout Germany, Sweden, and Norway; and in some parts of Great Britain, the ceremonies are still more remarkable. "It might have been thought," says Calmet's Commentator, "that the pompous rituals of Popery, would have superseded the druidical superstitions; or that the reformation to Protestantism, would have banished them; or that the prevalence of various sects, would have reduced them to oblivion; but the fact is otherwise." That writer then shows from the Statistical Accounts of Scotland, that "a town in Perthshire, on the borders of the Highlands, is called Tillie or Tullie-Beltane, i. e. *the eminence* (or rising ground) *of the fire of Baal.* On *Beltane* morhing, superstitious people go to drink of the well, and to make a procession round it;" and "many who reckon themselves good Protestants, will not neglect these rites even when *Beltane* falls on the Sabbath."

Another account taken from the same authentic Reports, is so curious that we present it entire: "On the first day of May, which is called *Beltan* or Bal-tein day, all the boys in a township or hamlet, meet in the moors. They cut a table in the green sod, of a round figure, by casting a trench in the ground, of such circumference as to hold the whole company. They kindle a fire, and dress a repast of eggs and milk in the consistence of a custard. They knead a cake of oatmeal, which is toasted at the embers against a stone. After the custard is eaten up, they divide the cake into so many portions, as similar as possible to one another in size and shape, as there are persons in the company. They daub one of these portions all over with charcoal until it is perfectly black. They put all the bits of cake into a bonnet. Every one blindfold, draws out a portion. He who holds the bonnet is entitled to the last bit. Whoever draws the black bit, is the devoted person who is to be sacrificed to Baal, whose favor they mean to implore, in rendering the year productive of the sustenance of man and beast. There is little doubt of these inhuman sacrifices having been once offered in this country, as well as in the East, although they now pass from the act of sacrificing, and only compel the devoted persons to leap three times through the flames; with which the ceremonies of this festival are closed."

Regulating business by the phases of the moon, is a practice also derived from the Heathens; and the following paragraph from Loudon, shows in strong colors the mental slavery that was entailed by superstition on the conquerors of the world. Well may we rejoice in the *light* and *liberty* of the Gospel which gives no countenance to any such absurdities; and earnestly ought we to plead with those among us, who are still under that *thraldom.*

"Some things, *Varro** observes, are to be done in the fields while the Moon is increasing; others, on the contrary, when she is decreasing, as the cutting of corn and underwood. At the change of the Moon pull your beans *before daylight;* to prevent rats and mice from preying on a vineyard, prune the vines *in the night time;* sow vetches before the twenty-fifth day of the Moon, &c. 'I observe these things,' says *Agrasius,* (one of fifty authors who *Varro* says had written on husbandry, but whose writings are now lost,) —'not only in shearing my sheep, but in cutting my hair, for I might become bald if I did not do this in the wane of the Moon.'"

The notion, that some days are more lucky or unlucky than others, is another remnant of ancient Heathenism. This superstition was held by the Greeks at least as early as the time of *Hesiod;* and it appears to have been carefully preserved through all succeeding ages down to the present day. We have been acquainted with men who believed they had risen far above the prejudices of the vulgar, who were yet *afraid* to set out on a journey on "Friday." What reason can be advanced in support of this apprehension? Can we presume that the care of the Almighty is not over all his works, on one day as well as on another? Or can we suppose that evil agents acquire a greater degree of strength *periodically,*—that is, once a week? For ourselves, we have had a choice in our excursions to start on that day, in order to bear our testimony against superstition; and we can seriously assure our readers that we have always been as successful in business, and as free from encountering dangers, as when we have gone forth on days vulgarly deemed "lucky."

Should any one glance an eye over our columns who is sensitive on this point; and should he ask what has all this to do with farming or horticulture? Cannot we go on just as well with our business whether we believe such things or not?—We would answer, No—not near as well. We have known farmers who would not on any account begin an important operation on "Friday," —not out of respect to the heathen goddess,* after whom that day is called,—but through fear that their progress would be retarded by "unlucky" events; and an instance has come to our knowledge, when the breaking up of a summer fallow ought to have been commenced on that day, as the team was idle and the ground softened by rain,—but which was deferred till the ensuing week, for no other reason whatever than that the day was "unlucky." Such interruptions are heavy clogs on the business of a farm.

We think the following extract from a late periodical, is much to the point. "It has been a prevailing notion among sailors, that *Friday* is an unlucky day of the week, and few can be found willing to go to sea on that day. To know that *Friday* does not always portend ill, this useful class of people may be told that Christopher Columbus embarked on his voyage for the discovery of America on *Friday*, August the 3d, 1492; and landed on Turk's Island (the first land he made) on *Friday*, October the 12th of the same year."

Agricultural Implements.

A Mechanic's Fair was held at Utica on the 15th, 16th and 17th of this month, at which a great variety of manufactured articles was exhibited. From an enumeration of the articles in the Utica Observer, we select the following notices of Agricultural implements:

In the agricultural department, (whatever pertains to agriculture, is entitled to the precedence, as in the herald's books, a plough in a field arable is the most ancient arms,) were many new and ingenious models of inventions to facilitate the labors of husbandry. Ploughs of superior manufacture, and various patterns, made by J. S. Peckham of this city, whom we judge to be unrivalled, as we did not discern that he had any competitor; a model of a machine for cutting grass and grain, the invention of Abm. Randall; a threshing machine, manufactured by Dean & Babbitt; a rotary cultivator, by Daniel Williams; cheese presses of an approved construction, combining wonderful power with great simplicity, invented and made by E. S. Scripture, of Sauquoit; butter tubs, made by steam power, in the most workmanlike manner, by George Parker, of this city, who has a large manufactory at Trenton; a corn planting machine, made in Denmark, Lewis county, and a fanning machine, the label to which we did not discern. In this department was also exhibited a sample of spring wheat, raised by Mr. Risley, of New Hartford, and fine specimens of flour from the Utica City Mills.

Sheep Husbandry.

From an article in the Cultivator on this subject, we make the following extract:

"There is little doubt but that the mountainous and hilly districts of our state, at present of comparative little value, will ultimately become our most profitable sheep grounds. They will afford a more healthy range for these animals than flat rich lands, and sheep will be maintained with far less expense upon them than upon the latter.—Sheep delight in pure free air and dry pasture, and are constitutionally fitted for rocky and stony situations; and indeed it is contended by some, and with much reason, in our opinion, that stony grounds are important to their health;—that on stony dry soils, they are not subject to the foot-rot and other distempers which are known often sorely to afflict them when kept on moist soft pastures. Many of the farmers in England pave the yards in which sheep are folded. If these animals can be profitably maintained upon farms worth from fifty to one hundred dollars per acre, they can be maintained with greater profit upon hilly lands costing from two to twenty dollars per acre; for certainly the difference in the herbage of the two descriptions of land will bear no proportion to the difference in price. Of all products of the farm, wool will best bear the expense of long transportation to market. When on a late visit to a friend in Massachusetts, we were told by an intelligent resident, that fifteen years ago most of the farmers of the town were deeply in debt, and their farms going to ruin; but that sheep husbandry, to which all but two or three had since turned their attention, had given an entire new aspect to their affairs; and that he would then engage to pay every debt owing by the inhabitants of the town, for the surplus produce of that season. It seems to be well established, that the soil, as well as the owner, of a sheep farm, become enriched by the flock.

As particularly applicable to the season, we recommend to all who stand in need of our advice, that they keep their sheep dry—give them pure air—and plenty of food, and carry them to spring grass, by all means, in good flesh. Ten well kept sheep are more profitable than thirteen badly kept. To protect them from storms in winter, you should have a covered shelter for them to

* *Marcus Terentius Varro*, the friend of *Julius Cæsar*, was regarded as the most learned of the ancient Romans.

* *Friga* or *Freya*, an imaginary deity of the Saxons.

resort to at night. To ensure them pure air, this shelter should not be habitually, if at any time, wholly closed at the sides. To keep them dry, they should have a liberal supply of straw litter, and this often repeated. This will also become a matter of economy in regard to manure, as the straw will absorb and prevent the loss of the urine, which is a moiety of the manure. To keep them in good health and good plight, feed them well, stint them not in salt; and feed turneps, potatoes or coarse grain occasionally, particularly to such as have to give suck. If you have not the roots, by all means provide them another year; for rely upon it, there is no more profitable winter, or rather spring food, for sheep, than Swedish turneps—they are wholesome, nourishing, and tend greatly to enrich and increase the milk of the ewes. Green food is besides highly valuable for all farm stock in the spring of the year."

Planting Fruit Trees.

I have for many years devoted a good part of my time to raising fruit trees. I have watched my own experiments, as well as those of my neighbors, with a critic's eye, and feel a desire of laying before your readers my plan of planting trees. I do not claim the pre-eminence over any one, neither do I set myself up as a criterion for others to be governed by; but having tried various ways, sometimes with partial success, and sometimes with the entire loss of my trees, I feel satisfied with my present plan of planting, and hesitate not to recommend it to others for trial.

The tree to be planted should be as young as circumstances will admit. The best season for planting is just when the leaves begin to turn yellow in the fall;—the spring will answer if done very early; the ground being prepared and the tree taken up, prune the roots with a sharp knife, so as to leave none over a foot long; and if any have been torn off nearer to the stem, prune the part so that no bruises or ragged parts remain; cut off all the fibers close to the roots, for they never live, but mould, and do a material injury; if they be cut off their place is quickly supplied with others; dig the hole twice as big, and one foot deeper, than the roots actually need for room; have fine earth and very fine rich mould, mixed together; lay some of this one foot deep at the bottom of the hole; place the roots upon this in their natural order, and hold the tree perfectly straight, while you put sifted earth in the roots, move the tree different ways, and give it a gentle lift and shake, so that the fine earth may find its way among the smallest roots, filling up the least cavity; every root should be pressed by the earth that is thrown in. When you have covered all the roots with the sifted earth, and have found that the tree is planted just as it originally stood, allowing four inches for it to settle; fill up the rest of the hole with common earth, and when you have nearly filled it, tread lightly on the dirt, then fill the remainder of the hole, leaving the top as light and smooth as possible; use no water, it sinks rapidly down, makes cavities among the roots, lets in air; the roots will mould and canker, and the tree often die. If the tree be planted early in October, it will have struck out roots a number of inches long before winter sets in, and this must be the best time for doing the business. They have the fall and winter to become perfectly settled, and in spring they have nothing to do but meet the genial rays of the sun, and to grow. The roots should be out of ground as short a time as possible, and if the roots become partially dry, soak them a few hours in soft water. If the tree be for an orchard, it should be five or six feet high, unless cattle can be kept out; and each one should be kept steady by a stake, for if they be moved about by the wind, the roots become loose and the tree injured,—if the trees be very short they will require no stake. They ought to be planted the second year after budding or grafting. If the tree be planted out in the fall, the head should be shortened down in the spring. If you plant in the spring, do it as early as possible, but the ground must be dry on the top when you plant, and as soon as the buds begin to swell, shorten the head. After a spring planting, guard against the drouth, by laying small stones round the tree, to the distance of two feet from the center. As it respects the distance of planting, this depends upon the different kinds of fruit, as some need more diutance than others.—*Ohio Far.*

Sheep.

A very considerable portion of the land in New England is rough, stony, and hilly, and must remain in pasture or woodland in consequence of its being intractable to the plough. When such lands have been grazed by neat cattle or horses for a number of years, they become nearly worthless, and are often abandoned by their owners for the more fertile regions of the West. Some sheep-farmers, however, assert that pastures in which sheep have been kept for years in succession, have improved, and now yield more and better food than they did before sheep were admitted. It is to be feared that many tracts of land in New England will eventually be abandoned, unless some method is adopted to prevent their deterioration.

If the above premises are correct, it is very important, indeed indispensable to the prosperity of New England, that sheep husbandry should become general. But, in order that it may become general, it must be made profitable; and none but the best breeds, for the purposes to which they are adapted, will be found advantageous for any other object than that of preserving the land from becoming barren in consequence of continued grazing.

Mr. John Lowell, in speaking of sheep, observed that "many questions which were once problematical, are now settled in favor of the Merino. It was doubted whether it would stand our climate—it does perfectly; whether its wool would not degenerate—it rather improves; whether its meat would be good for the table—it is as fine at least as any mutton we have; whether the wool could be exported to England and sell there at a fair price—it has been done, and met such a sale as would yield a much greater profit on Merino sheep than on the common sheep."—*American Almanac.*

Cutting down Woods.

Large quantities of wood are brought to this city from Long Island. The owners of woodland have adopted the plan of cutting every 15 or 20 years. Six or eight years is too frequent—10 to 15 may be the most profitable.—*N. Y. Far.*

An experienced agriculturist informs us that he considers it as an established fact, that the same forest land which produces sixty cords of wood per acre, when cut once in twenty years, would produce ninety cords, if the wood were cut three times during the same period. He thinks that the rapidity of the growth of wood depends much upon the frequency of cutting; and that wood land in general would yield a far greater profit, if cleared as often as once in six or eight years.—*Dedham Advertiser.*

The Egyptian Oat.

Grand Caillan, La. July 22, 1834.

In the Southern Agriculturist for November last, I observe over the signature of "A Highlander," the following:

"A variety of oat having the hardiness of rye or wheat, which we might safely sow in October, is a great desideratum with us. Pray, sir, if you or any of your correspondents know such a variety, inform us where seed can be obtained."

I have, for the last four years, sown what is in Louisiana and the Mississippi called the Egyptian oat. I find it succeeds well, sown any time in the fall; but it does best here put in from the 20th September to the middle of October; where it is put in early, and especially in a rich soil, care must be taken not to let it grow so large as to joint before frost, by which it is killed after jointing. This is prevented by turning stock on it when the ground is not too wet. Care should also be taken not to suffer it to be grazed too close, leaving the roots bare, by which it is often killed by frost; if not killed, it is much injured. By proper care and attention, as above, the Egyptian oat, when sown early, will be found valuable for winter pasturage, and by taking off the stock by the first or middle of February, will make a good crop. If sown without any regard to the advantage to be derived from winter grazing, I should prefer about the 15th of November here, (a little south of New Orleans,) and vary a little, according to climate. The Egyptian oat has a large grain; it is much heavier than the common kind. Should it be desirable, the oat crop will come off quite early enough to raise a pea crop afterwards. This is best done by breaking up the ground, then run a furrow crosswise four feet apart, and in this furrow drill the pea, (field or cow pea,) and cover with a light harrow. When they get eight or ten inches high, plough them, and let hoes follow, and put a little dirt, and the crop is made.

The Egyptian oat, I believe, is cultivated to some extent in many parts of Mississippi, and, I believe, generally preferred to any other kind, and I expect could readily be obtained for seed at Natchez, or in its neighborhood.—*Southern Agriculturist.*

Salting Hay.

In a conversation with a farmer of West Chester county, he informed us that he makes it a practice to salt all his hay when he puts it into his barn. He finds numerous advantages from the practice. Stock eat it more freely, waste less, and thrive better. It can be secured in finer order, and it keeps longer; does not become so dry and dusty as unsalted hay. He also considers it a preventive of many diseases. One season, a considerable portion of his hay was obtained from low wet ground, where it grew coarse. The remainder was of very superior quality—so much so, that he deemed salting unnecessary. The other coarse hay had a liberal quanity of salt put on to every layer, as it was mowed away in the barn. In winter he was surprised to find his horses and cattle give this coarse salted hay the preference.—*N. Y. Far.*

Green Vegetable Manure.

The value of green vegetables as manure was strikingly proved by me in the spring of 1833. I had a trench opened of sufficient length to receive six sets of potatoes; under three of these sets I placed green cabbage leaves, but the other three had nothing but the soil. When the crop was dug up, the plants over the cabbage leaves yielded about double the produce of the others.—*J. D. Parks, Dartford Nursery, January,* 1834.

Straw Hats.

It is stated that in the town (or township) of Franklin, near Wrentham, Mass. containing a population of about 1,700 persons, the value of straw hats manufactured by the females is between 75,000 and 80,000 dollars a year.

COMMUNICATIONS.

On Draught.--No. II.

In my last number, I alluded to *power*, in the abstract, and made some suggestions in relation to the difference between animal and mechanical power. Leaving the subject of mechanical power, as I then proposed, I shall now proceed to consider the *application of animal power;* and in so doing, shall have reference principally to the power and use of the horse, whose services are in constant requisition, and whose powers are familiar to us all.

The application of the power of a horse, in the ordinary occupations of life, would seem to be a very simple matter, as it really is, and hardly worth a minute investigation; and yet we shall find as we progress, that the result of every animal effort, must depend upon a vast variety of principles and circumstances, connected with the exertion made.

Upon the *structure* of the animal, much may depend, as I had occasion to notice when treating upon the Horse in vol. 2. Every animal is a beautiful piece of mechanism, made up of exquisitely fine wrought pullies and levers, which are forced into vigorous action at every exertion of power. A horse, from the very nature of his formation, is peculiarly calculated for *draught.* To exemplify this, let us consider for a moment, the difference in applying the power of a man and a horse. The process of dragging is produced, by throwing the body forward, and making its weight available as well as its strength, thus making the feet, the fulcrum of a lever, and the weight and strength the effective power. The center of gravity in both animals is about the center of the body, to wit, just behind the shoulders in the horse, and just below the arms in the man. Now supposing the weight and strength of both animals to be the same, the fact, that the hind legs of the horse must be considered the fulcrum, necessarily throws the center of gravity much further forward in the horse, than it could possibly be done by the man. Consequently the effect produced, must be in proportion to the weight of the body and the distance the weight is applied beyond the fulcrum. This is constantly the case in practice. The muscular strength of a man is nearly as great as that of a horse, but from his upright construction, he cannot apply it in the same way. He can carry a great weight up a ladder, if applied to his shoulders, and yet in the act of pulling, his power is lost, for the want of weight, and its proper application. The horse too, in ascending a steep hill, can produce very little effect, because in that case, his whole muscular strength must be exerted against his own gravity and that of the load; while on a horizontal surface, he is enabled to take advantage of his great weight, as well as muscular powers.

Now although the weight of a horse may remain the same, and be applied under most circumstances, with the same effect, not so with the muscles. A constant strain upon them, will soon destroy their power of action, and render the animal useless. We are all aware of this from experience,—thus we feel more fatigue by standing than by walking, because one particular set of muscles is then kept constantly exerted. We must therefore vary the resistance, so as to suit the power and gait of the animal. But in varying the resistance, it cannot be elastic or yielding, except at the expense of power; for in that case, if too much power should be applied, the horse would naturally fall forward, and thereby lose his exertion; and if the power should be insufficient, he would be drawn back by the strain, and it would require a greater effort to restore the motion. This is constantly exemplified in towing canal boats, and in the lead horses of stage coach teams. In the former case, the length and curve of the rope give an elasticity to the strain; and the necessity of keeping the rope out of the water, compels the animal to keep up an unremitted pull in an oblique direction. So in harnessing horses one before another, the leader by tightning the traces is constantly relieving the strain from the wheel horses, and the wheel horse from the leader, so that these horses labor under all the disadvantages of a long, elastic and constantly yielding load, which is not only fatiguing, but prevents their united exertion upon the carriage. A horse therefore to work to advantage, must have a rigid resistance, but neither uniform, nor without remission. Hence we readily perceive, why a horse works easier on an undulating road, than upon a perfectly level one, and also why he will draw more, when attached directly to his load, than when at a distance.

The *effect* gained by the action of a horse, or in other words his *productive muscular power*, must depend upon his *rate of speed*, the *power of traction he can exert*, and the *number of hours he can work.* As these are important considerations, connected with the *application of animal power*, it is desirable to examine them more in detail, and with that view, I shall avail myself, as heretofore, of the statements and calculations of Mr. Tredgold and others.

Neither the speed or power of a horse can be of any avail, unless some useful effect is produced, over and above mere velocity. Now the *limit* of *speed* in any horse, is the distance he can accomplish in a given time, for several days in succession, without weight; and the limit of his power, is when the weight can scarcely be moved. The medium point between these two limits, is evidently the one most advantageous for the application of his power. This medium is said to be, half the extreme or limit of velocity of a horse working unloaded; and the force of traction, half the limit of his power. For instance, if six hours be the length of a day's work decided upon, and if a horse working that time can go six miles per hour unloaded, and therefore producing no useful effect, and supposing the limit of power of the same horse equal to 250*lbs.*, it is found that he will do the most work in the same number of hours, when drawing a load at the rate of half six, or three miles per hour; and half of 250*lbs.* or 125*lbs.*, will be the strain corresponding to this speed. As the *limit* of *velocity* depends upon the time the speed is kept up, the following table, drawn from experiments, will show the proportion of duration of labor, and maximum of velocity of the average of horses:

	Hours.								
Duration of labor.	1	2	3	4	5	6	7	8	10
velocity in miles per hour unloaded.	14¾	10½	8½	7½	6¾	6	5½	5¼	4⅝

This evidently shows the advantage of reducing the speed, and prolonging the exertion. It will here also be seen, that the velocity of horses corresponding to eight hours work, is five miles and a quarter per hour, and consequently the rate at which he would travel when loaded is but little more than two miles and an half per hour. But Mr. Tredgold estimates, from long experience, the time in which the average of horses can accomplish most work without injury to themselves, to be only six hours per day, instead of eight, which will of course increase his average velocity when loaded, to three miles per hour.

But we cannot always control the velocity and time of duration, as here supposed, for our stage coaches and other conveyances for passengers, have reference only to speed, and the great object of proprietors is to obtain it with the greatest economy. Mr. Tredgold has given a table which shows at once the reduction of effect by increasing the velocity. A force of traction of 125*lbs.* continued for six hours at the rate of three miles per hour is taken as the standard, and considered equal to the arbitrary number, 1,000. The first column will show the velocity or rate per hour, continued for six hours per day; the second, represents the force of traction of which the animal is capable; and the third, the comparative effects produced.

Miles per hour.	Force of traction in lbs.	Effect produced.
2	166	888
3	125	1,000
3½	104	972
4	83	888
4½	62½	750
5	41¾	555
5⅛	36½	500

If however, the hours of labor be lessened, taking the velocity corresponding to the greatest useful effect, the results will be much greater, and the velocity may be raised much higher, as will be seen in the following table.

Here the first column is the length of day's work, the second, the velocity corresponding to that time, or half the limit of velocity shown in table first, and the third column, the comparative effect produced, the force of traction being in each case 125*lbs.*

Duration of labor in hours.	Velocity, miles per hour.	Effect produced.
2	5¼	578
3	4¼	709
4	3¾	813
5	3½	909
6	3	1,000
7	2¾	1,063
8	2 5-8	1,110

To attain higher velocity, it is necessary still further to reduce the load, and the following table is calculated upon the supposition of the strain being only one half the last, viz. 62½*lbs.*; this is about the average exertion of each horse in a four horse heavy stage coach.

Duration of labor, hours per day.	Velocity.	Effect produced.
4	5¼	613
3	6 2-5	534
2	7 4-5	434
1	11	307

In mail or light coaches, where ten, eleven, or twelve miles an hour is attained, the average strain of each horse is barely 40*lbs.*, and the effect produced, not much more than one half the above, or 160.

These tables are calculated upon the supposition that the roads are good and the resistance small, and therefore allowance must always be made when roads are uneven, for increased resistance, and a corresponding expense of power. It will be observed, too, that in rapid traveling the power is much more expensive, owing to the great loss sustained by increased velocity; and the bad consequences of a uniform strain, is more severely felt by the horses, and therefore occasional relief much more urgent.

From all that has here been stated, it will readily be seen, how important it is to all persons engaged in transporting property to understand fully the principles which regulate the increase or diminution of *effect* produced by their teams, and no persons have a greater interest in this subject than farmers. Their great object, with others, is to obtain the greatest amount of effect, with the least expense, and with the least expenditure of power. Let every man then, investigate this subject for himself, that he may know when and how he is obtaining the greatest possible effect, from the expense and power applied.

QUERCUS.

Brief Hints.--No. I.

BY RHO.

The Tomato.

Few vegetables of equal value are so little known through this country. None are more readily raised—none better repay the cultivator.

The Tomato, or love apple, is a luxury in common use through the south of Europe. In France and Italy, particularly, it is largely employed in culinary preparations. Either raw or stewed—in soups or fricassees—for gravy or catsup—as well as for pickles and sweetmeats—its utility is such, that it would not readily be dispensed with by those who have given it a fair trial in these varions ways.

The experience of several years enables me to recommend the Tomato to all who desire the acquisition in their gardens of a cheap luxury. For salubrity, none can surpass it. It has been constantly used, in various forms, at almost every meal during the last three or four seasons, by myself and several acquaintance, whose health continued excellent even when the prevalence of the cholera banished fruits and vegetables generally from most tables.

Should any who are now unacquainted with the Tomato, make the experiment of raising a supply, they may add to the simple luxuries of the table by adopting these directions for making

Tomato Catsup.

The Tomatoes, when fully ripe, should be be bruised and boiled slowly for half an hour—then strained through a cloth, and the liquid boiled for another half hour, after adding salt and spices, but without any admixture of water. The scum should be carefully removed, so as to render the liquor as pure as possible. It should be bottled, and kept in a cool place. After it has stood a short time, should any sediment be discovered in the bottles, (and in order to know with certainty, *clear* glass bottles would be the best for this use,) the liquor should be poured off into other bottles. In this way, catsup of excellent quality—preferable, in my judgment, to that from Mushrooms, and clear as choice Madeira—can be readily made, in greater quantity and with less trouble than in the common way. RHO.

Perennial Rye Grass.

BY T. S. P.

Last spring I procured a small quantity of the seed of the Perennial Rye Grass, and sowed them in my garden. My object was to ascertain whether it was adapted to our climate; and how far, from the smallness of the experiment, it might prove an acquisition in our rural management. The seed came up well, but during the heat and drouth of summer, some of the plants perished. The grass made but an indifferent appearance, until the rains commenced in the fall; after which it put forth rapidly, and has exhibited a most luxuriant growth ever since. Even at this time, though the thermometer has been as low as ten degrees, and the season generally quite cold, the blades are perfectly green, not showing the slightest appearance of having been nipped by the frost. It is decidedly the most beautiful grass I have ever seen, except perhaps the English grass or greensward, which it closely resembles in the length and glossiness of its spears. The bunches are large and the blades very long. Encouraged by the flattering result of this trial, I have purchased a few bushels for the purpose of sowing a lot; and I think I may confidently recommend others to do the same. There can be no doubt of its being well adapted to the soil and climate of New York, judging from the hardness with which it resists the cold. The quantity of herbage afforded by the Rye grass, appears so far, to exceed considerably that of Orchard grass, Timothy, or the tall Oat grass [*Avena elatior*], all of which, but particularly the last, I have cultivated to some extent. T. S. P.

Beaverdam, Va. 1 mo. 1st.

Pale or Picket Fence.

BY PERCY.

One way of making this kind of fence is, to nail both the rails on the face of the posts. This is the *weakest* manner in which you can build it. Another way is, to frame the lower rail into the posts, and nail the upper one on the top of the posts. The objections to this are, the difficulty of repairs when they are needed, and the liability to decay occasioned by the retention of water in the mortises. This is a stronger but more expensive way than the one first mentioned.

Another way is this:—If your fence faces the quarter from which the strongest winds usually blow, set the posts with the tops leaning an inch and a half over the bottoms—nail the lower rail on the face of the posts and the upper rail on the top even with the face edge of the post. You will find that in putting on the pales, they will stand perpendicular,—the thickness of the lower rail being equal to the projection of the top of the post. The reasons in favor of this way are—First, the posts are braced against the wind. Second, one rail being placed edgewise, it is the strongest way you can build it, because the pressure against the fence must come against that part of the rail most capable of bearing resistance. Thirdly, it looks well, because the tops of the posts being sawed off to receive the top rail, nothing is seen but the pales. There is no difficulty in setting the posts, for if you use a plumb line it is as easy to slant them exactly one and a half or two inches as it is to set them perpendicular. The paling is sharpened with an axe, and then nailed on by a top line. The distance of the pales from each other, and the nature of the ground, will determine the necessity of a bottom board. PERCY.

A——, Jan. 16, 1835.

Mr. Halsey's Report Reviewed.

NUMBER TWO.

There are, if I am not very much mistaken, sufficient reasons to induce and sustain the belief, that the Agricultural Society of '93 was a pre-eminently useful institution. The reasons principally relied upon for this purpose, are the following:—

1st. It is, I believe, a fact too obvious to be easily mistaken, that, at the time when this society flourished, there commenced, in this state, a great and extensive revival of agriculture, the arts and manufactures. From time immemorial, there had prevailed, in the minds of laboring citizens of all occupations, an almost deathlike torpidity, in regard to the practicability and importance of improving their respective arts. *Then* it was, that this torpidity so chilling to the hopes and expectations of better things, began to be disturbed, and was, in a good measure, broken up. *Then* it was, that farmers and other operators began to consider that advantages might be gained, by finding out and adopting better ways of performing the business of their respective occupations.

At the time when the Agricultural Society of '93 began its brilliant career, the agriculture of the state was, as it had been from time immemorial, in a miserably low and languid condition. It is scarcely possible for agriculturists of the present day, whose knowledge extends back only a few years, to conceive the difference between agriculture as it was practiced *then*, and agriculture as it is *now* practiced. Improvements in the theory and practice of this art, had rarely if ever been thought of as practicabilities. To some, the thought rarely occurred, that it was possible for them to improve, in the slightest degree, the system of husbandry which had been taught by their fathers. Of course, the practice of husbandry, in the state, had been, from generation to generation nearly uniform, no material changes having taken place to facilitate the operations of agriculture, or render them more successful.

For the truth of these alledged facts, I appeal to those of my fellow citizens, whose memories, like my own, reach back to the times spoken of. Say then, fathers, (for to fathers only can this appeal be made,) have you not witnessed a surprising change in the aspects and condition of New York husbandry since that memorable epoch, when Chancellor Livingston, and some other kindred spirits, instituted an Agricultural Society, in the year 1793?

If then, under the auspices of this society, *agriculture* revived, so too, and perhaps to a much greater extent, did the *arts* and *manufactures* revive. When was it, that the steam engine began to be investigated, with reference to its applicability to the purposes of navigation? Let it be remembered, the Agricultural Society now pass-

ng under review, was chartered, and come into existence, nearly forty two years ago. Had the noble Hudson, before that time, or had the lakes, or any of the seas of this State, been navigated by steam boats? Into whose mind, before that time, had entered the sublime thought of connecting the waters of the great lakes with the Atlantic Ocean?

Within the last forty two years, the arts and manufactures have flourished in this state, in a manner perhaps altogether unprecedented in any country. Is proof of this required? Look then to the diversified manufactories, now operating in almost every town, village and hamlet, in this state. Nay, look to canals,—look to rail ways,—look to steam engines, steam cars, and steam boats. Effects, whether small or great, are necessarily connected with their causes. Are Mr. Halsey, and his associates in committee, sure that the New York State Agricultural Society of '93, was not the means of giving the first impulse to mighty movements, which have been subsequently rolling on with increasing majesty?

2d. Another reason, inclining me to believe that the Agricultural Society of '93 acquitted itself well, and fulfilled, at least in a good measure, the expectations which it had excited, is derived from a consideration of the superior good sense, and distinguished abilities of its principal patrons and members. That venerable institution was not the progeny of pigmy minds, neither was its destiny wielded by impotent and unskillful hands. "There were giants in the land in those days."

On a Catalogue of the Society, published in the year 1798, I find a long list of names, many of which are names of well merited renown. Among them, I find the illustrious names of George Clinton, John Jay, Robert R. Livingston, Egbert Benson, Ezra L'Hommedieu, Samuel L. Mitchel, &c. Alas! they are names of the illustrious dead. I find too, on the same Catalogue, the name of De Witt Clinton; but he must have been young at that day, and could have claimed little more than to be one of the sons of the worthies. In the gigantic minds of such gentlemen as have been named, there must have been both *wisdom* to plan, and *skill* to execute. The force of this argument seems to be irresistible, when it is considered that, after the Society had operated eleven years and two months, its members applied to the Legislature, for a renewal of their charter, and were successful in their application. Eleven years and two months had been time enough to give to the project a sufficient test by experience. Who can doubt that, when these things were transacted, the Society was, in the estimation of its own distinguished members, moving on in the full tide of successful experiment? Neither can it be doubted that the Legislature, at that time, entertained similar views of it; for if they had not, surely they would not have renewed its charter as they did, with far more liberal endowments and perpetuity of existence.

3d. There can be no rational doubt, that the Agricultural Society of '93 rendered itself useful, to an incalculable extent, by its numerous publications. It was, I believe, the practice of the Society to issue annually a quarto volume, containing from 150 to 200 pages. The volumes thus produced, were replete with well written essays and remarks, on the most interesting subjects of agriculture, the arts, and manufactures. These volumes were extensively distributed, and, as I suppose, gratuitously, in all parts of the state. I am happy to say several of them came into my own hands, although a humble citizen, and living, as distance was then computed, far from the seat of government. The volumes thus acquired by myself, are still in my possession, and are *now* considered as a rich treasure, and a valuable appendage to my Agricultural library.

But in order justly to appreciate the value of these publications, at the time when they appeared, it must be considered that *then* they were lights shining in a dark place. Agricultural Journals had not, at that time, come into use in this country, nor did they, till after the patriotic Society of '93 had terminated its successful career. Dr. Dean of New Hampshire, had published a book on Agriculture, entitled the New England Farmer. It is believed this book was the only standard work on Agriculture, that had, at that time, been published in America. Thus almost midnight darkness overshadowed the Agriculture of the country. So it was, when the Agricultural Society of New York began to issue and disseminate its publications. By the agricultural community, groping then in darkness, these publications were hailed as so many celestial luminaries, rising, after a long and dark night, above the horizon. They were, indeed, valuable treasures, combining novelty with great intrinsic excellence. There can be no doubt that the publications thus produced and disseminated, were the honored instruments of awakening the citizens of this state, to a conception of those illustrious projects, the achievment of which has subsequently crowned the state with immortal honors.

It has been my object, in the preceding remarks, to exhibit, as nearly as I could, in the absence of public documents, a true portrait of the Agricultural Society which was instituted in this state, in the year 1793. I cannot suppose that I have done justice to the subject; yet I hope I have, in some measure, vindicated that venerable and praiseworthy institution, against the discreditable allusions of Mr. Halsey and his associates. What if, after the Society had lived in good health, twenty or twenty five years, and during its existence had achieved many acts of public utility, it did sicken, droop and die? This fact does not, as the Honorable Committee seem to suppose, afford proof that it had lived in vain. It proves nothing discreditable to the Society. The event may, indeed, have been a subject of regret; but it is an event, the like unto which is known to be infallibly incident to all institutions of human device. What if, after "the decease of many of its original members, and the urgent calls of others to public and private business," the remaining members of the Society did consent to surrender their charter? This may have been the fact. Yet I deny that, from this fact, as from similar facts, the slightest inference can be drawn, to the discredit of this, or any other institution.

The truth is, the Agricultural Society of '93 was instituted on a plan of limited agency, embracing, as its members, only a few distinguished citizens, dispersed over the state. Undoubtedly, it was, for the time then being, the best plan that could have been devised. But as population had increased, and Agriculture enlarged her boundaries, and especially, as a spirit of enterprise had been awakened, and was known to pervade the agricultural community, the plan of this Society was found inadequate to the exigences of the times. A plan of operations, in its nature more diffusive, and extending its immediate benefit to the whole agricultural community, was called for. The parent Society, (for so I am pleased to call it,) being apprised of this fact, did, with great magnanimity, consent to retire. It retired accordingly, and this was done in order to give place for the introduction of a new system, better adapted to the then existing state of things, likely to be more popular, and seeming to promise far greater and more extensive usefulness. Such a system was introduced under the auspices of the illustrious Clinton. And this will be the subject of several successive essays. SENEX.

December, 1834.

Culture of Silk.

It is some time since we jogged the elbows of our readers upon this subject. But we have nevertheless kept watch of the progress of the business, and are glad to see it increasing, though somewhat slowly. Several people in Maine have begun the business with a success proportioned to their exertions. One person, Mr. Thomas Jackson, of Winthrop, succeeded in raising two crops during the past season.—The last crop of worms were kept in a warm room. To pursue the business, however, to advantage, it will be necessary to prepare for keeping not less than one hundred thousand worms. This will take, we hardly know how many trees, but we will say 3000, which may be set out thickly on an acre of land. Some have calculated that this amount of trees will feed a million when they have arrived to the age of five years. If they will, so much the better.

Every year witnesses an immense amount of money sent out of the United States to pay for this article. According to the Treasury Report for 1833, the value of silks brought into the U. States was *nine millions one hundred and seventy-three thousand one hundred and ninety dollars*, and only one million two hundred thousand dollars worth of this was sent out. The product of all our flour and fishing trade together, would not pay for the silks brought in by more than *one million* of dollars. Here then is a chance for Yankee enterprise—Yankee industry and Yankee ingenuity to exert itself without a fear of being run down by competition.

Within the present year there has been new looms, reels, &c. invented by Gay & Bottom, if we mistake not, of Lisbon, Conn., which will make a great change in the business, making it still more an object for our farmers to begin the business. There cannot be much doubt now that the Chinese Mulberry will stand the severity of our winters. It did so last winter, and if it will this, with the thermometer over 30 below zero, we may certainly set it down as a hardy plant. At any rate, we know that the White Mulberry will, and that is the tree at present used for feeding the worm, though the other may possibly supersede it.—*Maine Farmer.*

Tiles for Stawberries.

From the Transactions of the London Horticultural Society, we take the following: "Flat tiles, painted black, are laid down round the plants, just as they are going out of flower. The tiles seem to be formed on purpose, for they are described as having at least half a circle cut out of each tile, in order that they may fit closely to the plants. 'The tiles during the day will not only prevent the exhalation of moisture from the soil, but also collect a great body of heat from the sun, and consequently form the fruit early, large, and well flavored.'"

Natural History.

An instance of the Robin's building its nest in a stoon of a bed, and rearing a brood of young there.

—I have a friend who resides a few miles from town, and during the late fine dry weather, the windows of some of the upper rooms in his house were seldom closed. A robin took advantage of this circumstance to pry into one of the apartments, one which was seldom used, and, finding no opposition here, she began to build her nest in a festoon of the bed. It happened that during the time of setting, the gentleman's son came from school on a visit, and the bed was wanted; but this did not in the slighest degree disconcert the robin; she seemed not in the least afraid, kept possession of her nest, and successfully reared her brood. The family, of course, felt interested in the bird's fate, and therefore as little disturbance as possible was given; but one would have imagined that the mere fact of a person bringing a candle into the room, dressing and undressing, would have been sufficient to have effectually driven the creature away.

The fascination of birds by reptiles has often been heard of. A curious instance of it was witnessed by a friend of mine, an officer in the Madras army, (Lieut. Col. Ross, then captain in the 10th Native Infantry,) where the operator was not a snake, as is usual in such cases, but a crocodile, or, as we improperly call it in India, an alligator. My friend, while taking a stroll round the works at Vellore, had his attention attracted by the strange restlessness and apparent distress of a kingfisher bird, (Alcedo smyrnensis,) perched upon one of the pinnacle battlements of the fausse-braye: on his cautiously approaching near enough to ascertain the cause, he observed in the ditch immediately underneath, a crocodile lying perfectly quiet in the water, and intently watching the bird with open jaws: in the mean time the victim's agitation continued to increase; it fluttered down to a projecting point in the works, then rapidly again and again farther and farther down, till at last it actually dropped into the gaping mouth waiting ready to receive it. Although I had this account at second hand only, I have not the slightest doubt of its truth.—*Loudon's Magazine.*

Maternal Attachment.

A celebrated preacher, named Bucholz, who resided at Hasmark, in Hungary, had occasion to go to the village of Emperies, distant about twenty English miles from his own place of abode. He traveled on foot, and took with him a small terrier slut, then in the last week of her pregnancy. After having been detained several days at Emperies by floods, he was compelled to return home without his dog, which in the mean time had brought forth a litter of five puppies.—He had not been in the house an hour, when, to his surprise, the slut came in bearing a puppy in her mouth, which she carefully placed upon the mat where she ordinarily lay, and immediately rushed out of the house again on the road to Emperies. In the space of twenty-four hours, she went and returned four times more, on each occasion bringing home a puppy in her mouth. It is hardly necessary to state that the puppies were quite dead as the mother brought them into the house. As the poor creature laid the last puppy upon the mat, she could scarcely stand for weariness; whined and trembled, looking upon her dead puppies, and after walking once or twice round the mat, she laid herself down beside them and died in a few minutes. In 24 hours the animal had run about 180 miles.

Leaves for Potatoes.

Leaves piled up in a pen, with alternate thin strata of swamp mud, when partially decomposed, are found a superior preparation for the Irish potatoe crop. Put around the roots of fruit trees, this compost has been found to produce a healthy and vigorous growth. Its operation has been much increased in its efficacy, by the addition of lime to the mass. The finest Irish potatoes that I have seen produced in a southern climate were produced by the addition of this compost.

From the Boston Com. Gazette.

Cold Monday--Jan. 5, 1835.

The papers from all quarters speak of the cold as almost without a parallel in our country. We give below a statement of the degree of the cold asreported on Monday morning, in various places, which may be useful as a matter of record:—

	Deg. below Zero.		Deg. below Zero.
Salem,	17	Fitchburg,	22
Portsmouth,	20	New Bedford,	6
Alfred, Me.	32	New York,	4½
Saco,	28	Essex,	20
Exeter,	32	Bangor,	34
Dorchester,	22	Dover,	28
Concord,	27	Troy, N. Y.,	32
Lowell,	24	Albany,	23
Haverhill,	24	Northampton,	30
Greenwich,	34	New Haven,	23
Lancaster,	35		

Mode of Extracting Wax from

HONEY COMB.

Have on the fire an open vessel of boiling water, and standing by the fire an open vessel of cold water; put the comb close tied in a canvas bag, into the boiling water, and repeatedly squeeze it down with a stick or large wooden spoon; the wax will come through the bag, and swim on the top of the water: skim it off and put it in the vessel of cold water; by repeatedly squeezing the bag and skimming, every particle of wax is obtained; when congealed on the cold water it may be taken off and melted and cast into moulds, of any convenient shape for sale.—*Glasgow Mechanic's Magazine.*

Potatoes.

Experiments with Potatoes have been carried on, with great care, in the Horticultural Society's garden, for some years past, and the results given in two papers by Dr. Lindley, the last of which is just published in part vi. of the Hort. Trans., vol. i. second series. From this paper it appears that the opinion entertained by Mr. Knight, and a number of other persons, of the superior production of whole tubers over sets, is unfounded. The same result, it is stated, has also been arrived at by Sir George Mackenzie, from experiments made by him at Rosshire. Other instances will be found in our First Additional Supplement to our Encyclopedia of Agriculture, just published.—*Loudon's Magazine.*

List of Payments

For the Farmer from Jan. 15, to Jan. 22, 1835.

For vol. 4.

Wm. Viber.	John E. Brown.
Wm. Underhill.	Daniel Dana.
Archer Macomber.	Hiram Lazell.
Jesse Hawley.	Micajah Sterling.
V. Grovesner.	

For vol. 5.

Horace Hills.	J. A. Miller.
C. A. Williamson.	Edmund Tucker.
Joseph Jacobs.	Wm. Parsons.
Alexander Ross.	Ward Parks.
John S. Randall.	Rhoad & Stael.
Henry S. Belding.	Jesse P. Haines.
Edward Hyatt.	J. L. Richardson.
Joab Center.	Sam'l. P. M'Donald.
Frank Punderson.	Job Otis.
John V. Duell.	W. H. Mead.
Alexander Robinson.	Madison Ham.
Patrick M'Laughlin.	Marcus Curtiss.
John Campbell.	Samuel S. Curtiss.
Alexander White.	Harrison Chase.
James Wilson.	E. Williams.
James Hadjerk.	Arvin Rice.
Dr. Mackelcan.	Waters Towsley.
S. Grimard.	N. D. Young.
Elias Beach.	Townsend & Coit.
A. Burns.	Samuel A. King.
Harvey Smith.	Sylvester Hosmer.
S. Van Rensselaer.	

To July, 1835.

E. Hall.	Jacob Griffin.
Thomas Saunders.	Adonijah Tillotson.

PRICES CURRENT.

ARTICLES.	PER	ROCHESTER. Jan. 24.	NEW-YORK. Jan. 17.
Ashes—Pot....	100lbs.	$3,40.....	$5,05 a 5,25
—— Pearl..	.....	4,00.....	6,90 a 7,00
Beeswax, yellow	lb.	0,18 a 0,20	21 a 22
Candles, mould	.....	0,12 a 0,00	10. a 13
—— dipped.	.....	0,11½a0,00	9 a 11
Cloverseed.....	.....	6½.....	9 .a. 10
Flax, American.	.....	.....	8..a..09
Flax seed, clean	tierce	9,00a10,00	16,00a16,50
Flour, Western.	barrel	4,75.....	5,50a 5,62
Grain, Wheat..	bushel	0,75a.0,00	1,06 a1,07
—— Rye....	.....	0,50.....	70.a..75
—— Oats...	.....	0,28.a..30	46.a..48
—— Corn...	.....	0,50.....	73.a..75
—— Barley..	.....	0,47.a..50	66.a..70
Hemp, American	ton	.....	100 a 120
Hops, last sort .	lb.	0,15.....	12.a..13
Plaster Paris...	ton	6,50 a 0,00	2,00 a2,25
Beef, Mess....	barrel	7,50 a.9,00	9,25 a 9,75
—— Prime....	.....	5,50 a 0,00	6,00 a 6,25
Pork, Mess....	.....	15,00a00,00	13,50a14,00
—— Prime....	.....	10,00.....	9,50a10,00
—— in the hog.	100lbs.	3,50 a 4,50	5,00.....
Tallow.....	.....	9,00 a 10,00	7,50 a 8,25
Hay.....	ton	9,00 a 11,00	9,75a11,20
Apples.....	bushel	75.a.100	.....

Wanted,

A QUANTITY of large white Lima Beans for which a high price in cash will be paid.

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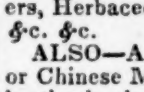
Monroe Horticultural Garden & NURSERY.



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ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Mo*nroe co. N. Y. Sept. 13, 1834.

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Book for Farmers.

NUTTALL'S Manual of Ornithology of the United States and Canada, with numerous Engravings, a volume containing 700 pages, price $2 50.

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A Remembrance.

"—— Oh, who would cast
The undying hope away of memory born?
Hope of re-union, heart to heart, at last,
No restless doubt between, no rankling thorn?"

I see thee still! thou art not dead,
Though dust is mingling with thy form;
The broken sun-beam hath not shed
Its final rainbow on the storm:
In visions of the midnight deep,
Thine accents through my bosom thrill,
Till joy's fond impulse bids me weep,—
For, wrapt in thought, I see thee still!

I see thee still,—that cheek of rose,—
Those lips, with dewy fragrance wet,
That forehead in serene repose,—
Those soul-lit eyes,—I see them yet!
Sweet seraph! Sure, thou art not dead,—
Thou gracest still this earthly sphere,
An influence still is round me shed,
Like thine,—and yet thou art not here!

Thou art not here; and never more,
Beneath the pale and sombre sky,
Will thy dear songs around me pour
Their gush of holy melody;
Years may roll on, and Time may shed
Some casual luster from his wing;
But my fair May of Love hath fled,
For Love hath but one golden spring!

Farewell, beloved! To mortal sight,
Thy vermeil cheek no more may bloom,
No more thy smiles inspire delight,—
For thou art garnered in the tomb.
Rich harvest for that ruthless Power,
Which hath no bound to mar his will:
Yet, as in hope's unclouded hour,
Throned in my heart, I see thee still!

[*Knickerbocker.*] W. G. C.

My Sister.

Have you a sister! well you know
The dearness of that name;
A love so quiet in its flow--
A pure unyielding flame.

Who can forget the days of youth
When all was happiness--
A sister's arch ingenious truth,
A sister's fond caress.

Oh! freely would I turn me back
And live my childhood o'er--
Oh! gladly wend the flowery track
Which I once trod before.

Say, shall I ever find a heart
As true as theirs have proved?
Shall thine as pure a joy impart?
My Sister, my beloved!

Considerations for Young Men.

Reading is a most interesting and pleasant method of occupying your leisure hours. I am aware that men of business have, usually, little time to devote to the improvement of their minds. Their active occupations must necessarily engross their chief attention. And yet in the busiest life, there are many unoccupied hours, fragments of time, which, if carefully gathered up, and duly improved, would afford opportunity for reading a great many useful volumes, and of acquiring much useful knowledge. If there are any persons so deeply engaged in business, that they can find no time to read, I would say to them, *take time.* It is not meant that you should spend the whole of life, as a mere beast of burden, providing only for the body, while you leave the mind, the immortal mind, to famish and starve The truth is, all men have, or may have, time enough to read. The difficulty is, they are not careful to improve it. Their hours of leisure are either idled away, or slept away, or talked away, or spent in some other manner equally vain and useless; and then they complain that they have no time for the cultivation of their minds and hearts. This is all wrong. The infinite value of time is not realized. It is the most precious thing in all the world,—the only thing of which it is a virtue to be covetous, and yet the only thing of which all men are prodigal. Time is so precious that there is never but one moment in the world at once, and that is always taken away before another is given. Only take care to gather up your fragments of time, my friends, and you will never want leisure for the reading of useful books. And in what way can you spend your unoccupied hours more pleasantly than in holding converse with the wise and the good through the medium of their writings? To a mind not altogether devoid of curiosity, books open an inexhaustible source of enjoyment.—And it is a high recommendation of this sort of enjoyment that it always abides with us. Nothing can take it away. It is in *the mind;* and go where we may, if our minds are well furnished and in good order, we can never want for means of enjoyment. The grand volume of nature will always lie spread out before us; and if we know how to read its wonders, the whole world will pour at our feet its treasures, and we shall hold converse with God himself.

But to those who are unaccustomed to read other books, this sublime volume must of course appear an unmeaning blank. They cannot read the glorious lines of wisdom and power, of majesty and love, which the Creator has inscribed upon it; all is to them as a sealed book; and they pass through the world none the wiser for all the wonders of creative power and goodness by which they are surrounded.

A taste for useful reading is an effectual preservative from vice. Next to the fear of God, implanted in the heart, nothing is a better safeguard to character than the love of good books. They are the hand-maids of virtue and religion. They quicken our sense of duty, unfold our responsibilities, strengthen our principles, confirm our habits, inspire in us the love of what is right and useful, and teach us to look with disgust upon what is low, and grovelling, and vicious. It is with good books as it is with prayer; the use of them will either make us leave off sinning or leave off reading them. No vicious man has a fondness for reading. And no man who has a fondness for this exercise is in much danger of becoming vicious. He is secured from a thousand temptations to which he would otherwise be exposed. He has no inducement to squander away his time in vain amusements, in the haunts of dissipation, or in the corrupting intercourse of bad company. He has higher and nobler sources of enjoyment to which he can have access. *He can be happy alone;* and is indeed never less alone than when alone. Then he enjoys the sweetest, the purest, the most improving society, the society of the wise, the great and the good; and while he holds delightful converse with these, his companions and friends, he grows into a likeness to them, and learns to look down, as from an eminence of purity and light, upon the lowborn pleasures of the dissipated and the profligate.

The high value of mental cultivation is another weighty motive for giving attendance to reading. What is it that mainly distinguishes a man from a brute? Knowledge. What makes the vast difference there is between savage and civilized nations? Knowledge. What forms the principal difference between men as they appear in the same society? Knowledge. What raised Franklin from the humble station of a printer's boy to the first honors of the country? Knowledge. What took Sherman from his shoemaker's bench, gave him a seat in Congress, and there made his voice to be heard among the wisest and best of his compeers? Knowledge. What raised Simpson from the weaver's loom to a place among the first of mathematicians; and Herschel from being a poor fifer's boy in the army, to a station among the first of astronomers? Knowledge. Knowledge is power. It is the philosopher's stone,—the true Alchemy, that turns every thing it touches into gold. It is the sceptre that gives us our dominion over nature; the key that unlocks the storehouse of creation, and opens to us the treasures of the universe.

And suppose you that her last victory has been won,—the utmost limits of her dominion reached? Nay, my friends, she has but commenced her march. Her most splended triumphs are yet future. What new honors she has to bestow on her followers, into what new fields of conquest and of glory she will lead them, no one can tell. Her voice to all is, to rally around her standard and go forward and aid in her victories, and share in the honor of her achievements.—None are excluded from this high privilege. Her rewards are proffered to all, and all, though in different measures, may share in her distinctions, her blessings and hopes.

The circumstances in which you are placed, as the members of a free and intelligent community, demand of you a careful improvement of the means of knowledge you enjoy. You live in an age of great mental excitement. The public mind is awake, and society in general is fast rising on the scale of improvement. At the same time, the means of knowledge are most abundant. They exist every where, and in the richest variety. Nor were stronger inducements ever held out to engage all classes of people in the diligent use of these means. Useful talents of every kind are in great demand. The field of enterprise is widening and spreading around you. The road to wealth, to honor, to usefulness and happiness is open to all, and all who will, may enter upon it with the almost certain prospect of success. In this free community there are no privileged orders. Every man finds his level. If he has talents, he will be known and estimated, and rise in the respect and confidence of society.—*Hawes' Lectures.*

Great Britain and her Colonies.

The annexed table furnishes a complete view of the extent of the British Empire, and the number of British subjects:

		Area in square miles.	*British subjects.*
U. King'm	England,	50,520	13,086,675
	Wales,	7,409	803,000
	Scotland,	29,605	2,365,930
	Ireland,	26,798	7,839,469
Bengal,		306,012	72,000,000
Madras,		141,323	14,700,000
Bombay,		64,938	7,000,000
Ceylon,		27,000	1,200,000
Penang, &c.		1,317	136,000
New Holland,		1,000,000	100,000
Van Dieman's Land,		29,000	48,720
Mauritius,		1,000	104,479
Cape of Good Hope,		120,000	136,375
Western Africa,		1,080	34,923
Lower Canada,		205,863	562,980
Upper Canada,		95,125	250,000
New Brunswick,		26,704	94,392
Nova Scotia,		14,031	139,000
Cape Breton,		3,125	30,000
Prince Edward's Isle,		2,159	32,000
Newfoundland,		35,923	80,000
Hudson's Bay Set'ment,		525,000	2,000
Jamaica,		6,400	359,000
Trinidad,		2,400	44,163
Barbadoes,		166	102,277
Grenada,		109	28,732
Antigua,		94	35,678
Montserat,		47	7,406
Dominica,		275	20,038
St. Vincent's,		131	27,734
Nevis,		20	12,159
St. Kitt's,		68	23,922
St. Lucia,		225	18,351
Tobago,		44	13,952
Tortola, &c.		120	10,642
Bahamas,		312	16,836
Bermudas,		36	8,920
Demerara, &c.		70,000	80,124
Berbice,		25,000	22,965
Honduras,		10,000	4,839
Malta, &c.		122	128,960
Gibraltar,		3	17,024
Jersey, &c.		—	65,836
Man,		220	36,000
Total,		2,824,040	121,829,501